# Ronald G. Riechers, II

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**Education** M.D., Northeastern Ohio Universities College of Medicine

Rootstown, Ohio

August 1996 - May 2000

B.S., University of Akron

Akron, Ohio

Major: Natural Sciences June 1994 - August 1996

**Post Graduate Training** Neurology Internship

Walter Reed Army Medical Center

01JUL2000-30JUN2001

Neurology Residency

Walter Reed Army Medical Center

01JUL2001-30JUN2004

**Licensure** State Medical Board of Ohio

#35.094265

Expiration: 20140401

American Board of Psychiatry and Neurology

Certification #53208

NPI Number: #1306938956

### **Honors and Awards**

Residency/Staff Teacher of the Year, 2005-2006, National Capital Consortium, Neurology

Residency

Teacher of the Year, 2007-2008, National Capital Consortium, Neurology

Residency

Robert B. Daroff Excellence in Teaching Award, 2011-2012, University

Hospitals Neurology Residency

Medical School Alpha Omega Alpha

American Society of Clinical Pathologists' Award for Academic

Excellence and Achievement, 1998

Health Professions Scholarship Program, U.S. Army, 1996 - 2000

Undergraduate Summa cum laude Graduate

Presidential Scholar

Phi Sigma Alpha Honor Society

# **Research Experience**

Medical School The use of Radio Frequency and microwave to image intracranial

hemorrhage, pneumothorax and compartment syndrome.

Uniformed Services University of the Health

Sciences, Bethesda, Maryland.

Chief Investigator: COL Geoffrey S. F. Ling, M.D., Ph.D.

Residency/Staff

Assessment of knowledge of the Glasgow Coma Scale among ATLS-

trained military physicians.

Walter Reed Army Medical Center, Washington, DC Chief Investigator: COL Geoffrey S. F. Ling, M.D., Ph.D.

Assessment of the efficacy of Botulinum Toxin for treatment of chronic

back pain secondary to trauma or acute strain

**Associate Investigator** 

Evaluation of the analgesic effects of Botulinum Toxin A in post-operative

pain and recovery after lumbar spine surgery

Associate Investigator

Defense Spinal Cord Column Injury Program

Co-Principal Investigator Botulinum Toxin Section

A randomized, placebo-controlled trial of citalogram for anxiety disorders

following traumatic brain injury

Principal Investigator

**WRAMC Site** 

A randomized, placebo-controlled trial of sertraline for the

neurobehavioral sequelae of traumatic brain injury

Principal Investigator

**WRAMC Site** 

A rodent model of traumatic brain injury suffered during sustained combat

operations

Principal Investigator

Cleveland VAMC

Funded via ORD Merit Review for 150,000 over 2 years

### **Publications**

### Journal Articles

- Ling, G.S.F., Riechers, R.G., Riechers, II, R.G., Et al., In Vivo Validation of a Novel Intracranial Hemorrhage Detector Using Microwaves. Proceedings of the Society of Photogrammetric Instrumentation Engineers 3172: 5-9 (1999)
- Ling, G.S.F., Riechers, R.G., Pasala, K.M., Blanchard, J., Rosner, M., Day, K., Garcia-Pinto, P., Song, K., Yun, C., Rawie, E., Davis, J., Scott, J. Riechers, II, R., Loh, Y., Crommett, J., Zeidman, S., Rhee, R., Ecklund, J.M., and Lockhart, S.H.: Diagnosis of subdural and intraparenchymal intracranial hemorrhage using a microwave based detector. Proc Int'l Soc. Optical Engineering 4037: 212-217 (2000)
- Ling, G.S.F., Riechers, R.G., Pasala, K., Blanchard, J., Nozaki, M., Ramage, A., Jackson, W.,Rosner, M., Garcia-Pinto, P., Yun, C., Butler, N., Riechers, II, R., Williams, D., Zeidman, S.M., Rhee, P., Ecklund, J.M., Fitzpatrick, T. and Lockhart, S.H.: Diagnosis of pneumothorax using a microwave based detector. Proc Int'l Soc. Optical Engineering 4368: 146-151 (2001).
- Ling, G.S.F., Riechers, R, Krishna, M.P., Blanchard, J., Rosner, M., Riechers, II, R., Yun, C., Garcia-Pinto, P., Day, K., Song, K., Jarell, A., Rhee, P., Ecklund, J, Fitzpatrick, T., and Lockhart. S.: Diagnosis of compartment syndrome using a microwave based detector. Proc Int'l Optical Engineering 4744: 118-124 (2002)
- Riechers, RG, Landau, ME, Farber, G, Campbell, WW: Damage to sensory fibers in a Martin-Gruber anomaly following biceps tendon repair. J Clin Neuromuscul Dis. 6:162-166 (2005).
- Riechers, RG, Ramage, A, Brown, W, Kalehua, A, Rhee, P, Ecklund, JM, Ling, GSF: Physician Knowledge of the Glasgow Coma Scale. J Neurotrauma 22:1327-1334 (2005).
- Hawley, JS, Ney, JP, Riechers, RG. Intramedullary spinal sarcoidosis: clinical improvement reflected in T-lymphocyte subpopulation ratios. Spinal Cord. 2006 Jan;44(1):49-51.
- Ruff RL, Riechers RG, Ruff SS. Relationships between mild traumatic brain injury sustained in combat and post traumatic stress disorder. F1000 Medicine Reports 2010;2:64.
- Riechers RG, Ruff RL. Rehabilitation in the patient with mild traumatic brain injury. Continuum Lifelong Learning Neurol 2010;16(6):128-49.
- Ruff RL, Riechers RG 2nd, Wang XF, Piero T, Ruff SS. A case-control study examining whether neurological deficits and PTSD in combat veterans are related to episodes of mild TBI. BMJ Open 2012;2(2).
- Marshall SA, Riechers RG. Diagnosis and management of moderate and severe traumatic brain injury sustained in combat. Mil Med 2012;177(S1):76-85.

Ruff RL, Riechers RG. Effective treatment of traumatic brain injury: Learning from experience. JAMA 2012;308(19):2032-3.

Ruff RL, Riechers RG, Wang XF, Piero T, Ruff SS. For veterans with mild traumatic brain injury, improved post traumatic stress disorder severity and sleep correlated with symptomatic improvement. JRRD 2012;49(9):1305-1320.

Theeler B, Lucas S, Riechers RG, Ruff RL. Post-traumatic headaches in civilians and military personnel: a comparative, clinical review. Headache 2013;53(6):881-900.

Riechers RG, Shuster JL, Bryan KB, Burant C, Ball SL. Effect of premorbid conditions on brain injury: Prior housing conditions and sleep loss may affect recovery from brain injury in rats. JRRD *in press*.

### **Abstracts**

Ling, GSF, Riechers, R, Pasala, K, Blanchard, J, Rosner, M, Crommett, J, Ramage, A, Loh, Y, Riechers, II, R, Yun, C, Ecklund, JM, Rhee, P, Fitzpatrick, T and Lockhart, S.H.: A novel noninvasive portable method for detecting intracranial hematoma, pneumothorax and compartment syndrome. American College of Physicians - Army (Fall, 2000).

Ling, GSF, Riechers, R, Krishna, MP, Blanchard, J, Rosner, M, Nozaki, M, Riechers, II, R, Jackson, W, Ramage, A, Crommett, J, Williams, D, Butler, N, Yun, C, Garcia-Pinto, P, Ecklund, J, Fitzpatrick, T and Lockhart, S.H.: RAFTS: A practical device for diagnosing pneumothorax in the prehospital setting. SPIE (Spring, 2001)

Ling, G.S.F., Riechers, R, Krishna, M.P., Blanchard, J., Rosner, M., Riechers, Jr., R., Yun, C., Garcia-Pinto, P., Day, K., Song, K., Jarell, A., Rhee, P., Ecklund, J, Fitzpatrick, T., and Lockhart. S.: Diagnosis of compartment syndrome using a microwave based detector. SPIE (Spring, 2002)

Riechers, II, R.G., Landau, M.E., Campbell, W.W. Ulnar sensory neuropathy in Martin-Gruber anomaly following bicipital tendon repair. AAEM/IFCN 2003 Joint Meeting (September 2003)

Cannard KR, Tsao JW, Labutta RJ, Riechers RG, Moquin RR, Rosner MK, Kuklo TR, Spencer NA, Ling GS. Pilot Study Using Botulinum Toxin: A Pretreatment of Lumbar Spine Muscles for Relieving Postoperative Pain. *J Neurological Sciences* 2005;238(Suppl 1):S502.

Mayorga, M.A. and Riechers, R., "Science of blast-induced injury and proposed mechanisms of brain injury", Spanish Journal of Neuroscience, Vol 10:1, 109-110, Jan-Mar 2008.

Riechers, R. and Mayorga, M.A., "Blast-induced traumatic Brain Injury: Diagnosis and Treatment", Spanish Journal of Neuroscience, Vol 10:1, 111-112, Jan-Mar 2008.

Riechers RG, Wang X, Hughes JD. Dopaminergic Modulation of Degenerative Spatial Neglect Phenomena. American Academy of Neurology Meeting, 4/2009, Seattle, WA. (Selected for Behavioral Neurology Scientific Highlights presentation)

Allred WT, French L, Wang X, Riechers RG. Incidence and Clinical Features of Autonomic Dysfunction in a Military Severe Traumatic Brain Injury Population. American Academy of Neurology Meeting, 4/2009, Seattle, WA.

Shuster JL, Riechers RG, Ball SL. Assessment of sleep deprivation on a rodent model of traumatic brain injury. Society for Neuroscience, 10/2009, Chicago, IL.

Soehnlen SG, Bryan K, Ball SL, Riechers RG. Effects of sleep deprivation prior to CCI on sensorimotor and cognitive function. Society for Neuroscience, 11/2010, San Diego, CA.

Bryan KJ, Soehnlen SG, Riechers RG, Ball SL. Social isolation prior to controlled cortical impact impairs motor/sensory and cognitive functions. Society for Neuroscience, 11/2011, Washington, DC.

Ruff RL, Riechers RG, Ruff SS, Wang XF, Piero T. Treatment of Post Traumatic Stress Disorder (PTSD) Rather Than Presence of Neurological Deficits (NDs) Correlated with Improvement of Post-Concussive Symptoms (PCS) from Combat Mild Traumatic Brain Injury (mTBI) Incurred in Iraq or Afghanistan. American Academy of Neurology Meeting, 4/2012, New Orleans, LA.

Riechers RG, Ruff RL, Ruff SS, Wang XF, Piero T. Neurological Deficits (ND) and Post Traumatic Stress Disorder (PTSD) Are Related to the Number of Episodes of Mild Traumatic Brain Injury (mTBI) in US Combat Veterans. American Academy of Neurology Meeting, 4/2012, New Orleans, LA. (Selected for Scientific Highlights section)

### **Chapters**

Riechers, R.G., II, Jarell, A. and Ling, G.S.F., CNS Infections. In Suarez, J (ed), "Critical Care Neurology and Neurosurgery" Humana Press, April 2004.

Ling, GSF, Riechers, RG. Preoperative to knife and beyond: Aortic surgery and neurological issues. American Academy of Neurology 2006 Meeting Syllabus. April 1, 2006.

Ling, GSF, Riechers, RG. Coma: Prognosis after severe hypoglycemic, hypoxic-ischemic or traumatic brain injury. American Academy of Neurology 2006 Meeting Syllabus. April 1, 2006.

Riechers, RG, Ling GSF. Fluid management in acute ischemic stroke. In Geyer JD, Gomez C (ed), "Stroke: A Practical Approach", Lippincott, Williams & Wilkins, 2008.

Riechers, RG, Ling, GSF. Stroke: A Guide For Prevention For Patients And Families. In Battle, CU (ed), "Essentials of Public Health Biology: A Guide for the Study of Pathophysiology", Jones & Bartlett Publishers, 2008.

Ruff RL, Riechers RG, Walker MF, Ruff S. Headache. In Arcieniegas DB, et al, "Management of Adults with Traumatic Brain Injury", American Psychiatric Publishing, 2013.

# **Teaching**

#### National Presentations

- "Traumatic Brain Injury in the Global War on Terrorism: The Walter Reed Experience", Arkansas Brain Injury Association Meeting, Keynote Address, Little Rock, Arkansas, 8/31/2006
- "Generational Issues: Military and Medical Perspectives", Evolving Paradigms National Conference, Office of Seamless Transition, Department of Veterans Affairs, Las Vegas, Nevada, 4/11/2007
- "Severe and Penetrating Traumatic Brain Injury at Walter Reed Army Medical Center", Army Medical Department (AMEDD) Neurology Meeting, Washington DC, 11/12/2007
- "Visual Consequences of Severe and Penetrating Traumatic Brain Injury", Visual Consequences of Acquired Brain Injury Conference, Department of Veterans Affairs/Department of Defense, San Antonio, Texas, 12/4/2007
- "Management of Severe and Penetrating Traumatic Brain Injury at Walter Reed Army Medical Center", Blast Conference, James A. Haley Veterans Affairs Medical Center, Tampa, Florida, 12/14/2007
- "Science of blast-induced injury and proposed mechanisms of brain injury", Maria A. Mayorga and Ronald G. Riechers, Society for Applied Neuroscience Conference, Seville, Spain, 5/7-11/2008
- "Blast-induced traumatic brain injury: Diagnosis and Treatment", Ronald G. Riechers and Maria A. Mayorga, Society for Applied Neuroscience Conference, Seville, Spain, 5/7-11/2008
- "Mild Traumatic Brain Injury and Post-Traumatic Stress Disorder: A Panel Discussion", 2<sup>nd</sup> Annual TBI Military Training Conference, Department of Defense, Washington DC, 9/26/2008
- "Severe and Penetrating TBI: Neuropathology and Clinical Challenges", Association for Applied Psychophysiology and Biofeedback TBI Workshop, Washington DC, 11/8/2008
- "The Neurologic Exam in Mild Traumatic Brain Injury", 3<sup>rd</sup> Annual TBI Military Training Conference, Department of Defense, Washington DC, 9/17/2009
- "Headaches in the Returning OIF/OEF Veteran: The Role of Traumatic Brain Injury", Evolving Paradigms Conference, Department of Veterans Affairs, Las Vegas, Nevada, 9/24/2009

"Sleep Dysfunction and Pain", A Team Approach to Veterans with Co-Morbid Conditions Conference, Department of Veterans Affairs, Orlando, Florida, 6/22-24/2010

"Evaluating Traumatic Brain Injury: History and Examination in the Clinic or Hospital Setting", The 13<sup>th</sup> Annual Force Health Protection Conference, United States Army, Phoenix, Arizona, 8/10/2010

"Sleep Dysfunction and Traumatic Brain Injury", 4<sup>th</sup> Annual Military TBI Training Conference, Department of Defense, Washington, DC, 8/30/2010

"Headache Management: Focus on TBI and the OIF/OEF Population", VISN 12 Special Topics in Pain Management Conference, Department of Veterans Affairs, Milwaukee, Wisconsin, 11/10/2010

"Headache Management in Primary Care", VHA National Pain Management Conference 2011, Department of Veterans Affairs, Jacksonville, Florida, 3/1/2011

"Mild Traumatic Brain Injury Symptom Management: The Big Three", 5<sup>th</sup> Annual Military TBI Training Conference, Department of Defense, Washington, DC, 8/22/2011

"Post Traumatic Headaches: A Neurologist's Perspective", VA/DoD Polytrauma Grand Rounds, San Antonio Military Medical Center, San Antonio, TX, 3/12/2012

## Local Presentations/Teaching

### Case Medical School

Block 6 Neurology Block Leader 2011-present

IQ Teaching	Block 6	2008-9	Facilitated 1 <sup>st</sup> half of block with Dr. R. Ruff
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2009-10 Facilitated entire block (shared several sessions

with Dr. R. Ruff)

2010-11 Facilitated 1<sup>st</sup> half of block

2011-12 Facilitating 1<sup>st</sup> half of block with Dr. R. Ruff

Medium Size Group Block 6 2009-2010 Facilitated Brainstem Nuclei session

2010-2011 Facilitated Brainstem Nuclei, Visual

Pathways and Brainstem Vignettes

2011-2012 Facilitated Brainstem Nuclei, Visual

Pathways and Brainstem Vignettes

Advanced Clinical Skills Teaching 2009 Taught Dementia Basic Science 7 and 10/2009

2010 Taught Dementia Basic Science 7/2010

2011 Taught Dementia Basic Science 8/2011

### Neurology Residency

Neuro-Rehab TBI Didactic Given weekly to rotating resident on Rehab rotation since 2009

Mentor to present PGY-3 Resident since beginning of his residency

### **Grand Rounds**

"Blast Injury and the Nervous System", Cleveland VA Rehabilitation Grand Rounds, 12/4/2009

"Blast Injury and the Nervous System", University Hospitals Neuroscience Grand Rounds, 3/26/2010

"Pain Management in the OIF/OEF Veteran: The Role of Polytrauma", Cleveland VA Pain Management Grand Rounds, 10/21/2010

"Combat Traumatic Brain Injury and PTSD: Signature Injuries of our Current Wars", Ellen and Irving Rothchild Lecture, University Hospitals Psychiatry Grand Rounds, 11/5/2010

"Traumatic Brain Injury: Overview of Severe Traumatic Brain Injury", Rehabilitation Grand Rounds, Cleveland VAMC, 4/1/2011

"Combat Traumatic Brain Injury and PTSD: Signature Injuries of our Current Wars", Neuroscience Grand Rounds, Case Western Neurological Institute, 5/4/2011

"A Day in the Polytrauma Clinic: mTBI, PTSD, Pain", Cleveland VA CBOC Mental Health Provider Meeting, 6/10/2011

"Management of Post Traumatic Headaches: A Neurologist's Perspective", Cleveland VA Pain Management Grand Rounds, 4/19/2012

"Traumatic Brain Injury: Where the Brain and Mind Collide", Cleveland VA CBOC Mental Health Meeting, 6/8/12

# **Activities and Leadership Positions**

Medical School Alpha Omega Alpha

Vice President, 1999 - 2000 Student Conduct Council, 1997 - 2000

President 1999 - 2000

M3 Curriculum Committee, 1998 - 2000 M4 Curriculum Committee, 1999 - 2000

Overall Curriculum Committee

Vice Chairperson, 1999 - 2000

Leadership, Education, and Professionalism Committee, 1997 - 1998 American Medical Association - Medical Student Section, 1996 – 2000

Residency Neurology Residency Training Council

Resident Representative, 2002-2004

Walter Reed House Staff Council

## Neurology Representative, 2003-2004

Staff Physician

Medical Director, WRAMC Site, Defense Veterans Brain Injury Center American Academy of Neurology Member, 2003-2008 Clinical Assistant Professor, Department of Neurology, Uniformed Services University of the Health Sciences, 2005-2008

Staff Neurologist, Louis Stokes Cleveland VAMC, 2008-present

Medical Director, Polytrauma Team, Louis Stokes Cleveland VAMC, 2009-present

Assistant Professor, Department of Neurology, Case Western Reserve University, 2009-present

Block Leader, Block 6, "Cognition, Sensation, Movement", Case Medical School, 6/2011-present